



BOROUGH OF BEDFORD.

REPORTS

OF THE

MEDICAL OFFICER OF HEALTH

AND OF THE

SANITARY INSPECTOR

FOR THE YEAR 1919.



Borough of Bedford.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

for the Year 1919.

To the Bedford Urban Sanitary Authority.

LADIES AND GENTLEMEN,

I have the honour to submit to you my Annual Report for the year 1919, on the Public Health of the Borough of Bedford.

NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT.

POPULATION.

Owing to the dislocation of the population during the years 1914 to 1919, any estimate made in the same way as in previous reports before the war would be utterly untrustworthy. The best is that kindly furnished by the Rate Collector (Mr. C. E. Craddock) as follows:—

BOROUGH OF BEDFORD.

(Estimate of Population, 30th June, 1919).

Estimated No. of Houses in the Borough, 30th June, 1919	9,583
No. of Empty Houses. including houses in Military occupation (extracted from Rate Books)	229
Estimated No. of Occupied Houses	9,354
Average Occupiers per house (Census, 1911)	4 $\frac{2}{3}$
	41,158
Allow for increased No. of Occupiers per house; two persons per 100 occupied houses	186
	41,344

It is probable that the figures for the average occupiers per house will be found to be rather lower at the next Census.

The Registrar-General's estimate is as follows, and agrees closely with the above:—

For Birth Rate	41,686
For Death Rate	40,017

As the population at the last Census was 39,185, it will be seen that it is practically stationary; nor is it likely to increase in the near future unless there is a development of manufacturing industry.

PHYSICAL FEATURES AND GENERAL CHARACTER OF THE DISTRICT.

The Borough of Bedford lies on the River Ouse, which runs from west to east through the town, the larger portion of which is situated on the northern bank. From the river the ground rises very gently towards the low range of hills which form the northern boundary of the valley, and at this point are closely approached by the river. To the south of the river extends the plain of the valley. In times of heavy rain the Ouse is subject to floods, which, in exceptional cases, extend to some portions of the town situated close to the river. This inconvenience has been greatly lessened by the construction of an overflow below the Old Bridge. The normal level of the river at this point is 82·6 feet above Ordnance datum; the level during the flood of April 30th, 1908, was 87·79 above Ordnance datum. The higher part of the town attains to 124 feet above O.D. Geologically speaking, the town is built over gravel and alluvium near the river, and on clay in its upper portions. The clay is Oxford clay. In some places there are limited formations of the Cornbrash and the Kellaway sands. In dry seasons inconvenience is sometimes caused by fissures in the clay, resulting in damage to the foundations of houses. In past years when the river was unusually full, portions of the town in its neighbourhood have been subject to flooding.

SOCIAL CONDITIONS.

As a county town with a weekly market in the centre of an agricultural district, Bedford is naturally the scene of many varied occupations connected with the land, but it may be broadly classed as a residential town, mainly devoted to education. This is due to the existence of the Harper Charity, bequeathed to his native town by Sir William Harper, a Lord Mayor of London in the reign of Elizabeth. The Harper Estates, chiefly situated in Holborn, were in 1873 placed under the care of Trustees, and the revenues are now mainly devoted to the upkeep of the various Harper Schools. These comprise the Bedford School, numbering 800; a High School for Girls, with 600 pupils; a Modern School for Boys (600); and a Modern School for Girls (300). The Harper Elementary Schools for Boys, Girls, and Infants are also in large part maintained from the funds of the endowment. Till the year 1897 the whole of the Elementary Education was provided by the Harper Trust, but the growth of the town necessitated the formation in that year of a School Board, now superseded.

The great expansion of the town in the last forty years is in the main attributable to the remodelling of the Harper Charity; the throwing open of the Schools having attracted large numbers of new

settlers, who came for the sake of the educational advantages.

Though not a manufacturing town, Bedford yet possesses several factories (three or four being of considerable size), for the manufacture of agricultural implements, of electrical engineering plant, cranes, &c., which give employment to over 3,000 men. There is also a large chocolate factory situated on the Elstow Road in a growing neighbourhood. The fact that the town lies on the main line of the Midland Railway, and is also served by a branch of the London and North-Western Railway system, together with the fact that suitable land for manufacturing purposes lies close to these lines, makes the town a suitable centre for the establishment of engineering and other works, which need not interfere with the amenities of the residential quarter at its opposite extremity.

A brief summary of the chief occupations of the inhabitants abstracted from the Census returns of 1911 is as follows:—

MALES (10 years and upwards).

Unoccupied	...	...	...	...	...	...	3,071
Occupied	...	...	...	...	...	...	10,918
Total Occupied and Unoccupied...							13,989
Professional, Business, Miscellaneous	...	...	...	...	...	...	2,085
Transport	...	...	...	...	...	...	1,380
General Engineering, Manufacturing, and Construction...	...	...	...	...	...	...	4,169
Dress, other Trades, and Foods	...	...	...	...	...	...	1,989
Labour	...	...	...	...	...	...	651
All other Occupations	...	...	...	...	...	...	614
							10,918

FEMALES (10 years and upwards).

" Unoccupied " (outside home)	...	...	...	...	...	11,984
Occupied	..	...	...	...	...	6,642
Total Occupied and Unoccupied...						18,626

At the last Census in 1911 there were 1,621 men classified as engaged in General Engineering and Machine Making; during the war these numbers were largely exceeded; at the present time an approximate estimate makes the number to be 3,340. In other trades and occupations it is not probable that the returns will differ greatly, except perhaps for female domestic servants, from those of 1911.

Miscellaneous Professions	...	...	...	...	642
Domestic Indoor Service	...	...	...	...	2,925
Miscellaneous	...	...	...	...	1,035
Dress	...	...	...	...	1,409
Food	...	...	...	...	631

Of the Females, 9,894 were unmarried, 6,944 married, and 1,788 were widowed.

VITAL STATISTICS.

Taking the Registrar-General's estimate of the population as 40,017, for the purpose of calculating the Death Rate, and the number of deaths being 476, we find that the rate per 1,000 is 11·89. This compares favourably with the general death rate for England and Wales, and also with that of the 148 "Smaller Towns," with populations between 20,000 and 50,000, among which Bedford ranks, this latter rate being 12·6.

Again, taking for the purpose of the Birth Rate, the estimate of 41,686 given by the Registrar-General for the population, and the number of births as 588, we obtain the birth rate per 1,000 of population of 14·11; in 1914 the rate was 16·08. There were 51 deaths of infants under one year of age, giving an Infantile Death Rate of 86·73 per 1,000 births, as against 89 per 1,000 births for the whole country, and 90 for the "Smaller Towns." If we compare the birth rate of Bedford with that of the whole country, 18·5, and with that of the 148 "Smaller Towns," 18·3, we see that the local rate is very greatly below the average; this is to be explained partly by the "age and sex constitution" of the town, which contains a large proportion of children of school age, who come here for their education, but it also points to the serious social phenomenon not confined to this town, nor indeed to this country, that the birth rate is falling steadily. In 1902 the birth rate for Bedford was 20·12 per 1,000 of the population. The actual numbers of the births and deaths in Bedford since 1896 are given below:—

Date.	Births.	Deaths.	Date.	Births.	Deaths.
1896	741	331	1908	702	411
1897	744	433	1909	717	429
1898	691	422	1910	715	376
1899	753	405	1911	706	485
1900	749	424	1912	716	426
1901	767	436	1913	678	398
1902	735	380	1914	650	459
1903	711	398	1915	677	607
1904	732	473	1916	699	494
1905	668	416	1917	620	495
1906	744	459	1918	625	592
1907	718	477	1919	588	476

POOR RELIEF.

The Clerk to the Guardians of the Bedford Union (Mr. W. G. Daniels) has kindly supplied the following information:—

As the statistics which have to be returned to the Ministry of Health relate to Poor Law Districts which do not coincide with the Borough boundaries, the figures are necessarily only approximate.

Taking the periods of comparison as March, 1919, and March, 1920:—

	March, 1919.	March, 1920.
Number of cases in the Borough in receipt of		
Outdoor Relief	177	181
Total number of dependent persons in these		
cases	340	310
Weekly cost	£63	£81

The number of persons receiving Institutional relief (*i.e.*, admission to the Poor Law Institution) from the Borough Parishes is not exactly ascertainable except by a minute process of dissection, but there is a 10% increase over the whole of the Poor Law Union, and no striking difference has been observed between the ratio inside the Borough and that outside.

The above figures do not show any wide divergence between 1919 and 1920; the only material divergence is in the category of "Casuals," which for the whole Union numbers 98 per week in 1920, as against 41 in 1919.

The Bedford County Hospital had during the year 895 in-patients, and 2,694 outpatients; also 1,042 new casualties. The total attendance was 12,964. These figures include not only the town attendances, but also those from the surrounding district. There is also a large and most valuable Public Medical Service and Dispensary.

SANITARY CIRCUMSTANCES OF THE DISTRICT.

WATER.

RAINFALL FOR 12 MONTHS ENDING 31ST DECEMBER, 1919.

	<i>Inches.</i>		<i>Inches.</i>
January	3'03	July	1'85
February	2'15	August	1'47
March	2'81	September	1'92
April	2'06	October	0'77
May	0'95	November	1'30
June	0'60	December	3'79
Total		22'70	

The Water Supply of Bedford is derived from the Oolite rock. The Waterworks are situated at the extreme N.W. boundary of the Borough, and consist of two portions. Of these, the first is situated between the Clapham Road and the Ouse, and consists

of the Old Pumping Station and the Old and Branch Headings, and of the New Pumping Station and "No. 2 Well," which are about 125 yards due south of the Old Pumping Station. The second portion of the works are situated on the top of the hill on the opposite side of the Clapham Road. The lift is about 180 feet. The filtering apparatus at the top of the hill comprises a battery of 8 "pressure filters," four circular "sprinkler filters," and the three original rectangular filters. The Reservoirs are three in number, and consist of the original Storage and Service Reservoirs, and of the New Service Reservoir; the latter is built of concrete, and has a capacity of about 540,000 gallons. The sprinkler filters have revolving sprinkling arms pierced with holes for the distribution of the water over the beds; the two older ones having four arms, and the two newer six arms. The diameters of the beds of the two older are 88 feet, and of the two newer 93 feet. Connected with each filter is an automatic syphon, arranged so as periodically to set the arms in motion and to bring them to rest. In the two older beds the filtering material consists of layers of sand and polarite, supported on gravel; in the two newer the polarite is dispensed with.

The total quantity of water pumped to the Reservoirs averages per week 7,000,000 to 8,000,000 gallons.

The quality of the water is excellent; a bacteriological examination is made weekly of samples from the two Service Reservoirs.

The water finds its way into the headings through fissures in the Oolite rock, some of which no doubt communicate with the river, but the bulk of the supply is from the rock. The possibility of contamination is very small, as the nearest village on the banks is Clapham, about a mile and a half above the Pumping Station. In times of flood this village is sometimes inundated, and there is then a great likelihood of contaminating material being swept down the river; at such times, however, the bulk of water coming down is so great that any objectionable matter must suffer extreme dilution. No epidemic of illness has ever occurred in the town which could be traced to pollution of water from this source, and cases of typhoid are very rare in Bedford, and have nearly always been due to importation.

DRAINAGE AND SEWERAGE.

The war has had a most unfortunate effect upon the Borough with regard to the Sewerage Scheme. This, though sanctioned by the Local Government Board as far back as 1912, and at once commenced, is not yet in operation, though it is hoped that the works may be opened in the middle of this year (1920). The town has, therefore, been dependent upon the old Sewage Farm, and this during a period when at times the population of the Borough was for months at a time 50 per cent. in excess of the normal. The Borough is greatly indebted to its Surveyor for the able manner in

which, under great difficulties, he has coped with the greatly increased work thrown on the already overburdened area of the Farm.

This is situated to the east of the town, and comprises 248 acres. The system employed to purify the sewage is that of broad irrigation, and has been in operation since the year 1868. The effluent is discharged into a channel known as the New Cut, which runs into the river near Newnham. The Pumping Station is situated at the end of the Embankment Walk, about a mile from the Old Bridge. The pumps are driven by electric energy derived from the Corporation Works. The Farm has only been once materially enlarged since its establishment, when the town numbered only 13,000 inhabitants.

During the war it was found necessary to obtain the temporary use of some extra land on a neighbouring farm. Notwithstanding this, serious complaint has been made as to the condition of the effluent, and a serious question has at times very nearly arisen.

The new Sewage Scheme, which was estimated originally to cost £110,500, consisted of two portions intimately connected, viz., a Main Drainage and a Sewage Disposal Scheme, and was formally inaugurated on June 28th, 1912, by the then Mayor (W. Roff, Esq.)

The Main Drainage Scheme comprised new sewers for the southern portion of the town, to be ultimately connected with the northern half of the system by an iron pipe laid in the bed of the river; the new sewer after thus crossing the river, picking up the existing northern sewer under the Embankment at the old Pumping Station, and running thence to the new Pumping Station. This has been erected on the same site, and in connection with the Refuse Destructor, it being intended that the energy developed in the Destructor cells should be utilized in working the pumps by which the sewage will be raised to the Sewage Disposal Works on Summer House Hill, situated about a mile from the Pumping Station.

As owing to the low level of the ground between the Elstow and London Roads, it would have been impossible to make any connection between the sewers of this district and the existing sewer head opposite Vulcan Street, the portion of the scheme relating to this district was carried out separately, and the sewage is at present lifted by means of a Shone's Ejector into the existing sewer head at Vulcan Street; when the scheme is fully ready these sewers will be connected up with the large sewer pipe crossing the river, which has been already mentioned. The surface water of the district is diverted into a ditch along the London Road, which debouches into the river below Cardington Mill.

The Sewage Disposal Works comprise a new Pumping Station at the Refuse Destructor Works, and a 39-inch Rising Main carry-

ing the sewage across the river by means of a bridge to the top of Summer House Hill (a gentle eminence about one mile from the Pumping Station), on which the Purification Works have been erected. These consist of a series of precipitating tanks provided with outlets for running the sludge by gravitation into a special area, where it is proposed to treat it by "digging in." It is proposed to treat the crude sewage by chemical precipitants before the fluid effluent is diverted to the bacteria beds, which are arranged in two concentric semi-circles, the one above the other; the fluid gravitating from the upper to the lower tiers and finally discharging into the river. The beds are circular in form and filled with clinker, the fluid being distributed over them by revolving "sprinkler filters," worked by the fluid, the flow of which is controlled by dams in the inlet channels.

The alternate periods of activity and rest for each filter are regulated by an attached automatic syphon.

The works have been completed for some time, but owing to the high cost of chemicals and other war conditions, have not yet been used; it is hoped that they may be started in June of this year.

CLOSET ACCOMMODATION.

The sanitation of the town is carried out entirely on the water-closet system; the number of houses in the Borough, in the middle of 1919, was approximately 9,560, and of these less than 20 are provided with closets other than water-closets. At the end of 1919 there were in use 4 pail closets, 7 earth closets, 6 cesspools, 3 middens, and 1 septic tank. These are all attached to houses situated in open ground on the outskirts of the borough. The three middens are situated on the property of one of the railways.

Owners of small houses, whenever their property is undergoing repairs at the instance of the Authority, are always urged to replace the insanitary and antiquated box seats of the closets by the infinitely more cleanly hinged ring seat and pedestal pan. In the newer houses of every class this is the prevailing type. The larger number of pans are of the wash down type, as opposed to the wash out. It is doubtful if any of the old D traps are left in the town, and if there be such, they would only be found in very old-fashioned houses of a rental which places them outside the range of systematic inspection.

SCAVENGING.

There are very few fixed receptacles for house refuse, the great majority of houses being provided with moveable receptacles. There has been of recent years a very great improvement in this respect. In some of my Reports before the war I called attention to the fact that many of the smaller householders had nothing better than old boxes, footbaths, and similar articles, in which to

deposit their refuse. A vigorous campaign under the energetic direction of the Chief Sanitary Inspector was initiated, and as a result a large proportion of the houses are now provided with proper galvanized iron sanitary dustbins, with proper covers. Unfortunately, in the last three years, owing to abnormally high prices and shortness of supply, it has not been possible to continue this reform at the former rate.

The total average quantity of house (and shop) refuse removed and disposed of per annum is about 10,000 tons. The house refuse is removed twice per week from about two-thirds of the town and once per week from the remaining one-third. There are 13 horses, 12 vans and carts, and 26 men engaged in the work. The vans and carts have sliding iron covers.

The refuse during the war was tipped into a ballast pit on the Irrigation Farm outside the Borough, as the Refuse Destructor was closed down on account of the war, but it is expected that the Destructor will start up again this year, when the whole of the house refuse will be burnt, as before. The system is quite efficient, and complaints are very few and far between.

SANITARY INSPECTION OF DISTRICT.

Full details of this are given in the appended Report of the Sanitary Inspector. In regard to the sanitary condition of the Public Elementary Schools it may be stated that the water supply is satisfactory. The various departments are distributed amongst six groups of buildings in various parts of the town. All the buildings are comparatively modern, with the exception of those of the Harper Schools in the centre of the town. These are old and inconvenient, being also badly lighted. In the Ampthill Road Schools the heating arrangements require improvement. One grave defect common to all the schools is the "trough closet" system of sanitation. This is objectionable in itself, and should be condemned on the ground that where it is in use the children are not trained in the matter of personal cleanliness, and the proper use of the water-closet system at home.

FOOD.

MILK SUPPLY.

It may be stated at once that the milk supplied to the town is up to the standard as laid down by the Board of Agriculture; out of 60 samples sent for analysis 54 were reported as genuine; in the remaining six the results were as follows:—

No. 10.	Added Water	...	...	11·7%
No. 20.	„ „	...	...	20%
No. 31.	Abstracted Fat	...	...	8%
No. 32.	„ „	...	...	48%
No. 62.	Added Water	...	...	3·8%
No. 63.	„ „	...	...	23%

Nos. 31 and 32 were from the same source. Proceedings were instituted, but owing to an unfortunate accident to the 3rd (reserved) samples, which prevented their production in Court, the case came to an abortive end. Nos. 62 and 63 were also from one source. Enquiry showed that in this instance the poorness of the milk was due to bad and insufficient feeding of the cows. On the advice of the Town Clerk no proceedings were taken by the authority, owing to the practical impossibility of obtaining a conviction in view of the Cambridge decision in *Hunt v. Richardson*. The matter was reported to the Board of Agriculture. For similar reasons no proceedings were taken in the case of Nos. 10 and 20.

Strictly speaking, there are no Dairies in the Borough, all the milk being supplied from cows on farms in the surrounding district, or obtained by rail, as "accommodation milk," by the dealers from other sources, often at a great distance.

There are only two cowsheds within the Borough. These are situated upon the outskirts on farms. One of them now contains only five or six cows, and will shortly be closed; it has been properly kept. The other contains a considerable number of cows; it has recently been remodelled on modern lines, and is very satisfactory. There has been no occasion to take any proceedings under the local Regulations, in which are embodied the provisions of the Dairies, Cowsheds, and Milkshops Orders of 1885 and 1899.

MILK AND CREAM REGULATIONS, 1912 AND 1917.

Very little cream was on sale in the town during the past year owing to the Control and the shortage of milk, and no samples were taken under the Regulations.

MILK (MOTHERS AND CHILDREN) ORDER, 1918.

The provisions of these Orders were put into effect towards the end of the year, owing to the distress caused by the strike of the Ironmoulders, but were not extensively employed till the beginning of the present year (1920).

MEAT INSPECTION, DISEASES IN MEAT, AND CONDITION OF SLAUGHTER HOUSES.

The inspection of Meat and Slaughter Houses is in the hands of Mr. E. T. Fell, who holds the Special Certificate for Meat Inspection of the Royal Sanitary Institute. The Inspector, who is provided by the Authority with a bicycle, in order to facilitate his work, paid 3,650 visits to slaughter-houses during the year. As far as possible he makes a point of being present at the time of slaughtering, but owing to the large number (22), and scattered positions of the various premises, this is not always possible.

The following table gives the particulars as to the carcasses or portions of carcasses from Slaughter Houses and Meat Shops which were condemned as unfit for food.

DESCRIPTION.				REASONS FOR		WEIGHT
<i>Home Dressed.</i>				SEIZURE.		IN LBS.
1	Carcase and Offals (Cow)	...	...	Generalized	Tuberculosis	240
1	Carcase and Offals (Cow)	...	...	Generalized	Tuberculosis	520
1	Carcase (Cow)	...	...	Generalized	Tuberculosis	311
1	Carcase (Cow)	...	...	Generalized	Tuberculosis	320
1	Carcase (Cow)	...	...	Generalized	Tuberculosis	347
1	Carcase (Heifer)	...	...	Generalized	Tuberculosis	454
1	Carcase (Heifer)	...	...	Generalized	Tuberculosis	444
1	Carcase and Offals (Cow)	...	...	Generalized	Tuberculosis	610
1	Carcase and Offals (Cow)	...	...	Generalized	Tuberculosis	626
1	Carcase and Offals (Heifer)	...	...	Generalized	Tuberculosis	340
1	Quarter and Offals (Cow)	...	...	Localized	Tuberculosis	116
	Trimnings and Offal (Cow)	...	...	Localized	Tuberculosis	61
	Trimnings (Cow)	...	...	Localized	Tuberculosis	20
	Trimnings and Offals (Cow)	...	...	Localized	Tuberculosis	150
	Trimnings and Offals (Cow)	...	...	Localized	Tuberculosis	28
	Offals (Cow)	...	...	Localized	Tuberculosis	20
	Liver and Heart (Cow)	...	...	Tuberculosis	...	59
1	Sheep	...	...	Moribund	...	60
1	Carcase (Cow)	...	...	Wet and Unfit	...	328
1	Carcase and Offals (Cow)	...	...	Fevered (Calving)	...	226
1	Calf and Offals	...	...	Moribund	...	100
1	Hind Quarter (Ox)	...	...	Injury during life	...	35
1	Quarter of Beef	...	...	Injury during life	...	136
	Heart and Tongue (Ox)	...	...	Actimongeosis	...	47
5	Livers (Ox)	...	...	Abscess	...	94
3	Livers (Ox)	...	...	Fluke (" piped ")	...	52
1	Ribs of Beef	...	...	Wet and Unfit	...	31
1	Loin of Beef	...	...	Unfit	...	30
1	Ox Tongue	...	...	Unfit	...	9

<i>Imported.</i>						
Beef	...	...	...	Unfit and damaged in		
				Transit	...	4338
Beef	...	...	...	Bone Taint	...	95
Mutton	...	...	...	Unfit	...	50
5	Sides of Mutton	...	...	Black Mould	...	146
3	Sheep	...	...	Black Mould	...	107
	Tripe	...	...	Unfit	...	8
	Kidneys	...	...	Unfit	...	31
Total weight of flesh condemned				...	...	9,859 lbs.
Total weight condemned from Tuberculosis				...	...	4,196 lbs.

During the war and up to the present Bedford has served as the centre of distribution (in the district surrounding the town) for all home reared and imported meat. The condition of a good

deal of the imported meat was far from satisfactory; this was largely due to bad handling, and delay in transport; in short, the average quality of the meat available for the public during the latter years of the war was much below the pre-war standard.

In the legal sense, no meat was "seized," the local traders having in all cases given immediate information to the Inspector and assisted him in every way. Early in 1918 four slaughter houses were taken over by Government for the purposes of meat control, but have since been released. Matters have not yet returned to the normal conditions.

There is no public abattoir in Bedford. In this connection I may perhaps be permitted to quote from one of my Annual Reports, made as far back as 1908:—

"In any application that may be made for parliamentary powers, authority to erect a Municipal Slaughter House, and, if possible, to prohibit the use of private slaughter houses in the Borough, should be one of the main objects sought.

"The advocating of such a plan involves no reflection upon the local butchers. I have made numerous visits to the various slaughter houses, which are under the constant supervision of the Meat Inspector, and I can testify to the satisfactory manner in which, on the whole, they are conducted. But the general arguments in favour of public abattoirs far outweigh, in my opinion, those on the other side. A public abattoir secures constant and unfailing meat inspection; the most improved methods of slaughter; the maximum of cleanliness, and the minimum of suffering. It operates in favour of honest traders, and it places the small trader, as regards efficient slaughtering, on the same level with the larger one. Experience has shown that most of the fears entertained by butchers as to interference with their business, are illusory. The objections raised against public abattoirs are that by throwing out of use existing slaughter houses, for which their owners have still to pay rent, they tend to raise the price of English meat, as the butchers must recoup themselves for their loss; that it is more convenient for the latter to have their slaughter houses close to their shops, and that public abattoirs can only be built at great cost and to the detriment of the ratepayer, who is prejudiced both by his increased rates and by the enhanced price he has to pay for his meat. Allowing due weight to such objections, I still believe that the trade would gain more than it lost, and the ratepayers not suffer financially, by the establishment of a modern and efficient public abattoir."

I believe that the feeling of the trade is now, since the war, more favourable to the abattoir system. In the difficult times of meat scarcity an abattoir, had it existed, would have been of the greatest value in assisting distribution. From the local point of

view, it is useless to look for this and many other desirable improvements owing to the serious financial position of the Borough in view of its already existing and most onerous commitments.

In addition to the raw meat condemned, the following articles of food (preserved, tinned, &c.) were surrendered and destroyed :

DESCRIPTION.	WEIGHT IN LBS.
6 Tins of Corned Beef	36
4 Tins of Ox Tongue	24
3 Consignments of Sausages (delayed on rail)	106
3 Cases of Frozen Chicken	83
1 Case of Frozen Rabbits	65
Imported Bacon	2870
2 Consignments of Argentine Fresh Butter	210
13 Boxes of Smoked Haddock	182
4 Boxes of Mackerel	448
17 Cases of " Tinned " Fish	1904
8 Casks of Fresh Herrings	896
4 Boxes of Fresh Herrings	448
1 Box of Cod Fish	140
Cod	28
<hr/>	
Total weight	7440 lbs.

The miscellaneous seizures were as follows :—

79 Boxes of Dates	5534 lbs.
2 Boxes of Currants	120 lbs.
2 Boxes of Raisins	120 lbs.

The total weight of food thus condemned as unfit for human consumption was 23,073 lbs., or nearly 10½ tons.

FOOD AND DRUGS.

78 samples of food and drugs were purchased during the year and submitted to the Public Analyst for examination.

ARTICLES.	NO. OF SAMPLES.	RESULT.
Milk	60	6 Adulterated.
Margarine	2	Genuine.
Dripping	2	"
Sausages	3	"
Salmon Paste	1	"
Pepper	1	"
Baking Powder	2	"
Epsom Salts	3	"
Cream of Tartar	1	"
Cinnamon and Quinine Tablets	1	"
Olive Oil	2	"
Town Water	3	Normal.

BAKEHOUSES, ETC. .

There are 59 Bakehouses on the Register, none of which are underground. Though some of the premises are small and old-fashioned, they are clean and well conducted.

There are no establishments in the town in which foods are prepared on a large scale, except the new Chocolate Works of Messrs. Peak, Frean & Co. on the Elstow Road. The various pork butchers mostly prepare pies, sausages, and similar articles on a small scale for local consumption. The sanitary conditions are satisfactory.

PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASES.

The year 1919 was marked by a considerable increase in the number of Scarlet Fever cases, and a great decrease in the number of Diphtheria cases, as compared with 1918. The annexed table shows the incidence of these diseases for the last 14 years.

Year.	Scarlet Fever.		Diphtheria.	
	Civil.	Military.	Civil.	Military.
1906	218	...	94	...
1907	72	...	39	...
1908	65	...	65	...
1909	75	...	40	...
1910	66	...	33	...
1911	107	...	106	...
1912	135	...	94	...
1913	306	...	122	...
1914	101	81	128	35
1915	131	98	131	47
1916	43	10	114	23
1917	23	1	110	7
1918	76	11	84	9
1919	120	3	35	...

It will be noted that the Diphtheria cases were fewer than in any year except 1910.

66 throat swabs were examined for practitioners during the year.

TABLE SHOWING NUMBER OF CASES OF ACUTE INFECTIOUS DISEASE NOTIFIED DURING EACH MONTH OF THE YEAR 1919.

	Scarlet Fever.	Diph- theria.	Enteric.	Puer- peral Fever.	Ery- sipelas.	Acute Polio- myelitis	Total.
January ..	6	3	..	..	..	..	9
February ..	4	..	..	..	..	..	4
March ..	9	5	..	..	1	..	15
April ..	8	4	..	..	..	..	12
May ..	8	5	1	..	..	..	14
June ..	9	3	..	..	..	..	12
July ..	5	4	..	..	1	..	10
August ..	6	5	..	..	1	..	12
September	4	2	..	..	1	..	7
October ..	10	2	..	..	1	..	13
November	31	2	..	1	1	..	35
December	23	..	..	..	..	..	23
	123	35	1	1	6	..	166

Last year, all the Diphtheria cases, and 85 per cent. of the Scarlet Fever cases, were removed to the Hospital. A supply of antitoxin is kept at the Police Station for the use of medical practitioners should it be required suddenly during the night. Experience at the Hospital continues to show the benefit of using this invaluable remedy in large doses. The amount spent in Diphtheria Antitoxin during the year was £26 11s. During the later stages of the war, owing to scarcity of serum and other causes, the number of throat swabs taken for examination was greatly lessened, but the numbers are now returning to normal.

In the Spring there was an outbreak of Paratyphoid Fever, strictly limited to the inmates of a College of Physical Training for Young Ladies. The earlier cases showed symptoms which were attributed at first to Influenza, and it was only after several cases, nearly all very mild, had occurred, that the diagnosis of Paratyphoid, confirmed by blood tests, was established. In all, out of a total establishment of 99 persons, there were 48 cases, fortunately mostly of a mild type, and fortunately without any fatality. The most probable explanation of the outbreak was that it was due to a "carrier," a domestic servant who had come to the College as a kitchenmaid a week before the term began, and whose blood, been tested, showed the presence of the "Paratyphoid B" bacillus. The outbreak was fully investigated by Dr. H. A. MacEwen, of the Ministry of Health, assisted by Dr. Scott, in the bacteriological portion of the enquiry.

About the same time a single isolated case of Enteric Fever

occurred, entirely unconnected with the above outbreak. In this case the infection was suspected to be due to a "carrier," in the person of a temporary visitor to the house from Ireland. There had not been a case in the town for ten years, and certainly not since the outbreak of the war.

Subsequent enquiry in the case of "Enteric Fever," which appears in the Table of Causes of Death, showed that the diagnosis was exceedingly doubtful, and that the real cause of death was probably Influenza.

It not infrequently happens that enquiry fails to discover the source of infection, but in some cases it is possible to trace connection with a previous case. "Return cases" remain a constant source of anxiety in Hospital administration, and though every care is taken and cases of nasal and anal discharge are always detained till apparently cured, yet, unfortunately, cases of infection due to this cause still occur.

SCARLET FEVER.

- | | | |
|----------|--|---|
| Case No. | 2. | Brother developed Scarlet Fever a week previously. |
| " " | 4. | Brother returned from the Isolation Hospital two weeks previously. |
| " " | 8. | Brother returned from Isolation Hospital two months previously. |
| " " | 10. | Same house as No. 8. |
| " " | 27. | Some "sore throats" in house. |
| " " | 30, 31, 32. | Sister and two brothers. |
| " " | 54. | Came to Bedford day before rash developed. |
| " " | 84. | Contracted at seaside. |
| " " | 95, 96. | A brother had Scarlet Fever three months previously. |
| " " | 97. | A brother had Scarlet Fever five days previously. |
| " " | 98. | Case in same house a week before. |
| " " | 100. | Was going to London daily. |
| " " | 102. | In contact with No. 92. (Boarding house). |
| " " | 104, 105, 106, 114, 116, 119, 120, 121, 222, 125, 136 and 137, 140, 141, 142, 151. | In all these cases attending the Elementary Schools, there was, more or less evidence of "contact." |
| " " | 109. | Patient's two children returned from Isolation Hospital a week previously. |
| " " | 111. | A sister five days previously returned from Isolation Hospital, and next day developed a cold with running at the nose. |
| " " | 115. | Child (about $1\frac{1}{2}$ years) of No. 109. |
| " " | 117, 118, 128, 131. | Cases in private schools. |
| " " | 132, 143, 149. | Bedford School. |
| " " | 150. | Sister of 141 and 142. |
| " " | 155. | Sister returned from Isolation Hospital two weeks previously. |
| " " | 154, 156, 158 (Nurses). | Cases in Bedford County Hospital. |

DIPHTHERIA.

- Case No. 13. Clerk in a Government Department where several cases of Diphtheria.
- „ „ 49. "Went bathing." Subject to sore throat.
- „ „ 67. Had been in London three weeks till day of onset of illness.
- „ „ 71. Came from another town a week previously.
- „ „ 78. Another child in the house returned six weeks previously from Isolation Hospital after Diphtheria.
- „ „ 85. Just returned from another town.
- „ „ 94. Parents had had "colds."

List of Milk Dealers (represented by numbers) supplying milk to houses where cases of Infectious Diseases occurred in the Borough during 1919.

Dealers.	Houses Supplied.		Totals.	Dealers.	Houses Supplied.		Totals.
	Scarlet Fever.	Diphtheria.			Scarlet Fever.	Diphtheria.	
				Brought forward	54	18	72
1	10	1	11	21	1	0	1
2	0	1	1	22	1	1	2
3	1	2	3	23	2	0	2
4	1	0	1	24	3	1	4
5	2	2	4	25	3	1	4
6	1	0	1	26	2	0	2
7	1	1	2	27	0	4	4
8	1	0	1	28	2	1	3
9	4	0	4	29	1	1	2
10	5	2	7	30	0	2	2
11	4	4	8	31	1	0	1
12	1	0	1	32	12	1	13
13	5	0	5	33	2	0	2
14	3	0	3	34	1	0	1
15	3	0	3	35	2	1	3
16	1	0	1	36	2	1	3
17	2	0	2	37	0	1	1
18	4	1	5	38	0	1	1
19	0	1	1	39	2	1	3
20	4	3	7	various	5	1	6
condensed	1	0	1				
	54	18	72		86	36	122

Disease.	No of Cases.	No. of Houses Infected.
Scarlet Fever	123	92
Diphtheria	35	34
Enteric Fever	1	1
Paratyphoid Fever	30	2
Erysipelas	6	6
Puerperal Fever	1	1
Totals	195	136

One Infant School was closed for Measles in April, and in November and December seven classes were closed for short periods in five departments. All cases of absence due to Infectious Disease or of suspected disease, and of contacts are reported immediately to the Health Office, and the Head Teachers are informed immediately of all cases of infection notified to the Authority. I believe the prompt closing of the classes had a considerable influence in checking the spread of the epidemic. The compulsory notification of Measles ceased at the end of the year in accordance with the Order of the Ministry of Health.

Ten cases of Malaria were notified; these were all discharged soldiers, who had contracted the disease during service abroad.

There was a considerable amount of Measles in March and April, many cases occurring in the Secondary Schools; as the number of genuine measles sank there was an increase in the number of so-called "German" measles, the little epidemic lasting on into July; after the summer holidays there was only a few sporadic cases of either complaint.

Very few cases of Primary Pneumonia occurred, 13 in all, and there were also 13 cases of "Influenzal Pneumonia" notified. There were 126 cases of Chicken Pox. There was practically no "Epidemic Infantile Diarrhœa."

There were a good many cases of Influenza in the first half of the year, 23 deaths being notified during that period, and none during the last half of the year. Of the 23 deaths eight occurred in persons over 70 years of age.

TUBERCULOSIS.

The following table gives the number of cases notified during the year. The requirements as to notification are loyally observed by the medical practitioners, and it has never been necessary to take any action to enforce the regulations and secure prompt notification.

TUBERCULOSIS REGULATIONS.

NOTE.—Cases previously notified and re-notified are not included in the following figures.

TABLE OF CASES OF PHTHISIS CLASSIFIED BY SEX AND AGE.
January 1st, 1919, to December 31st, 1919.

Under 1.		1 and under 5.		5 and under 15.		15 and under 25.		25 and under 45.		45 and under 65.		65 and upwards	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
..	8	10	18	5	6	1	..	1

TABLE OF CASES OF OTHER FORMS OF TUBERCULOSIS CLASSIFIED BY SEX AND AGE.

Under 1.		1 and under 5.		5 and under 15.		15 and under 25.		25 and under 45.		45 and under 65.		65 and upwards.	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
..	..	4	..	2	3	1	2	1	1	..	..	..	..

SMALL-POX.

One of the outstanding surprises of the last five years has been the fact that no pandemic of Small-pox followed the war; in view of the still troubled state of Europe and the conditions prevailing in Russia, it would be unsafe to assume that all danger is over. This country in general, and Bedford in particular (see Table) is now without the protection afforded by vaccination, and should an epidemic occur it would, no doubt, be a bad one. When the building in the Isolation Hospital grounds was taken over as a Nurses' Dormitory provision was made on Corporation property near the Irrigation Farm, and a building, with a resident caretaker, is kept in constant readiness to receive any cases should such unfortunately occur.

The Vaccination Officer has supplied the following figures for 1919:—

BOROUGH OF BEDFORD.

Births	...	...	...	...	...	593
Vaccinated	...	...	...	...	...	86
Exemptions from Vaccination	...	...	...	...	...	401
Dead	...	...	...	...	...	37
Balance of Births not yet accounted for	...	...	...	...	...	69

MATERNITY AND CHILD WELFARE.

Though there still remains much room for extension and improvement of the work, yet distinct progress was made during the year, owing to the appointment of a specially trained Health Visitor (Miss Carrick), with large experience, who devotes herself entirely to Maternity and Child Welfare work. Since her entry on her duties in September there has been a very marked increase in the attendances at the Centres. These are now two in number, and are held at 92, Midland Road; the centre at the Institute in Harpur Street having been transferred to Midland Road with the happiest results on the attendance; the numbers attending averaging 70 per week and still increasing have outgrown the accommodation, and it is proposed to transfer the Welfare Centre work back to the Institute if better rooms can be provided. The accommodation hitherto available in this building was the main cause of the bad attendance, but given proper accommodation, there is no reason why the Centre should not prove still more prosperous than in its present quarters. Experience has shown the holding of the Centres in one central position is, in this town, much more successful than trying to run them in different districts. Each Centre holds one Session a week (on Tuesdays and Thursdays) in the afternoon, when the Medical Officer of Health attends for consultations, and a rota of ladies assists the Health Visitor by doing the clerical work. The popularity of the Centres has been greatly increased by the kind action of the members of the Women's Adult School in undertaking to supply tea to the mothers at a small charge.

In addition, the Health Visitor gives talks to mothers every Wednesday afternoon, when special attention is given to, and efforts made to encourage the attendance of, expectant mothers, thus gradually laying the foundation for an Ante-Natal Clinic; any premature attempt to establish which on a formal basis would be doomed to failure.

Arrangements have been made, and it is hoped very soon to open a Sewing Class.

There is also a Day Nursery at 92, Midland Road, under the management of a Committee appointed by the Infant Welfare Committee of the Town Council, which provides the cost of the rent, taxes and rates, coal and lighting, whilst the other expenses are met by voluntary effort directed by the Sub-Committee.

Advantage was taken during the year of the facilities afforded by this Institution to an encouraging extent, the rooms being generally well filled. Mothers attending the Centres whose infants are not doing well are encouraged to send them to the Day Nursery, where the regular feeding, strict cleanliness, etc., always prove of benefit. If the Welfare Centre is moved as proposed the Nursery will benefit by the increased accommodation.

Though the Borough Authority is not concerned with the administration of the Midwives Act, yet welfare work is so intimately

connected with that of the midwives, that it is pleasing and encouraging to be able to report that the relations between the two sets of workers are most satisfactory.

The Health Visitor generally begins her visits at a house about ten days after the notification of a birth is received, and the ideal aimed at is that on an average eight visits should be paid to each infant in the first twelve months of its life, though this standard has not been reached as yet. Attendance at a Centre is advised, and if the mother attends regularly the number of visits to the house can be reduced; if the mother does not attend the Centre or attends irregularly, the Visitor visits her at her home, and is generally successful in securing better attendance. In the case of delicate infants, or when any special reason exists, as for instance, Ophthalmia, the Visitor pays frequent, and, if necessary, daily visits.

The town is too small to support or to require a Maternity Hospital, at any rate, at present; cases requiring special surgical or medical treatment (*e.g.* eclampsia) are received at the County Hospital. The great majority of illegitimate births occur in the Public Poor Law Institution; in many cases the mother and child are transferred to a Rescue Home, which is maintained in the town by a voluntary association, "The St. Albans' Diocesan Union for Preventive and Rescue Work," and much good work is done by helping the mother to find work, and in re-establishing her, and in finding a home, when necessary, for her infant. Cases of severe illness in infants, including those of diarrhoea, are received at the County Hospital, but there is a certain number of infants and young children who, though not ill enough for admission to a General Hospital, would greatly benefit were it possible to provide some form of "hostel," where such cases could be taken in for observation and treatment. In any extension of Welfare work this object should be kept in view, and is already to a small extent attained, as mentioned above, by the Day Nursery.

Careful enquiry is made in all cases of still births and infant deaths, and of illegitimate births.

Of the births notified, 714 in number, 34 were premature (4.8%), and there were 20 still born infants (2.1%). In some of the cases of still birth the malnutrition of the mother was probably a contributing cause, and it is hoped that as the provisions of the Milk (Mothers and Children) Order were put into force in the Borough during the latter part of the year, there will be a considerable improvement in this respect during 1920.

The Health Visitor paid during the year 2,440 visits, giving an average of 3.4 visits per case; it is hoped that this average will be materially increased.

It has not, so far, been possible to deal systematically with children above infancy (2 years) and under school age, though a

few attend the Welfare Centres, and the mothers are encouraged to bring them.

There was no case of Puerperal Fever in the Borough, but one from a neighbouring district, admitted to the County Hospital, proved fatal.

Only one case of Measles, and two of German Measles in infants under one year of age, were notified during the year. There was no epidemic of Infantile Diarrhœa, and hardly any sporadic cases. Two deaths (at 6 months and 2 months respectively) were notified in October and November, and one death at 6 months was certified as due to acute Gastritis; there were no cases of poliomyelitis or other infectious diseases of parturient women, in infants, or young children; there were three cases of Chicken Pox in infants under 1 year, and one death in an infant of 2 months was due to Syphilis.

OPHTHALMIC NEONATORUM.

There were 18 cases of this disease notified, and in 17 of them full recovery ensued. All the cases in which no medical practitioner was in attendance at the time were visited by the Medical Officer of Health; 5 cases were removed to the Poor Law Institution for treatment; 10 cases were treated throughout by the Health Visitor, under the supervision of the Medical Officer of Health, and the Health Visitor also treated the Infirmary cases previous to removal, whilst three cases were treated privately.

[illegible]

DEATHS OF RESIDENT INFANTS, 1919.

SEX.	AGE.	CAUSE OF DEATH.
Male ...	2 days	... Prematurity
Male ...	3 months	... Broncho Pneumonia.
Male ...	3 month s	... Bronchitis.
Male ...	3 days	... Premature birth.
Female ...	1 month	... Marasmus.
Female ...	1 month	... Marasmus: Convulsions.
Male ...	13 days	... Anorexia.
Male ...	1 ¹ hour	... Premature birth.
Male ...	13 hours	... Premature birth.
Male ...	11 minutes	... Primary defective digestion.
Female ...	12 months	... Broncho Pneumonia.
Female ...	1 day	... Premature birth.
Female ...	2 days	... Prematurity.
Female ...	21 days	... Acute Bronchitis.
Female ...	2 days	... Convulsions.
Female ...	3 days	... Asthenia.
Male ...	26 days	... Premature birth; Convulsions.
Male ...	1 month	... Marasmus.
Male ...	19 days	... Marasmus; Premature birth.
Female ...	12 hours	... Premature birth; Convulsions.
Male ...	Few minutes	... Want of attention at birth.
Male ...	25 days	... Premature birth; Marasmus
Female ...	1 day	... Morbis Cordis; Convulsions.
Male ...	14 days	... Convulsions.
Male ...	6 months	... Acute Gastritis.
Male ...	1 day	... Congenital malformations.
Female ...	14 days	... Marasmus.
Male ...	9 months	... Whooping Cough (Bron. Pneu.)
Female ...	6 months	... Diarrhœa.
Male ...	5 weeks	... Pustular Eczema.
Male ...	3 weeks	... Purpura Hæmorrhagica.
Male ...	3 days	... Premature birth.
Female ...	5 weeks	... Convulsions.
Male ...	1 day	... Premature birth.
Female ...	6 days	... Marasmus.
Male ...	2 months	... Intussusception.
Female ...	2 months	... Marasmus; Syphilis.
Female ...	5 minutes	... Inattention at birth.
Male ...	2 months	... Diarrhœa.
Male ...	4 days	... Hæmorrhage after circumcision.
Male ...	21 days	... Dyspepsia.

TABLE SHEWING THE NUMBER OF BIRTHS DURING EACH MONTH OF THE YEAR 1919 AS RETURNED BY THE LOCAL REGISTRAR.

Month.	Legitimate.		Illegitimate.	
	Male.	Female.	Male.	Female.
January	15	28	4	—
February	13	19	4	2
March	12	16	4	3
April	20	16	2	4
May	22	21	—	2
June	18	22	1	4
July	19	22	—	4
August	22	22	4	2
September .. .	28	26	2	2
October	25	33	2	1
November	26	30	2	3
December	37	24	4	1
Totals	257	279	29	28

	Male.	Female.
Legitimate	257	279
Illegitimate	29	28
	286	307

SANITARY ADMINISTRATION.

The Sanitary Administrative Staff consists of the Medical Officer of Health, the Chief Sanitary Inspector, two Assistant Inspectors, of whom the senior acts as Food Inspector, and two Clerks, and two disinfecting and drain testing men. There are two Nurses, one of whom acts exclusively as a Health Visitor for Infant Welfare work, and the other as a half-time Health Visitor, the other half of her time being assigned to the School Medical Service. The Hospital Staff consists of a Matron, a Sister, two Staff Nurses, and 9 Probation Nurses, and the domestic staff.

In all cases of infectious disease, after removal or recovery of the patient, disinfection of the rooms and beddings is done, free of charge, by means of Formalin; in some cases the walls are sprayed with a disinfectant. In all fatal case of Phthisis, immediate notice of the death is given by the Registrar, and disinfection of the room occupied by the patient is always offered, and generally accepted.

Patients are removed to the Hospital in a horsed ambulance. A nurse is always sent out with the ambulance, which is kept at the Hospital. The Hospital is in telephonic communication with the Health Office and with the Medical Officer and the Chief Sanitary Inspector.

The Isolation Hospital is situated within the Borough boundaries between the London and Elstow Roads. The area of 17 acres on which they are built, purchased from the St. John's Hold Trustees, was increased by the purchase during the year 1911 of two portions of land abutting on the Hospital grounds, and measuring 5 acres 3 roods. The acquisition of this extra land was necessary in order to prevent new houses being built close up to the Hospital.

The buildings are of the "temporary" type, and comprise seven distinct blocks. With the exception of the laundry block, which is entirely of brick, all the blocks are "iron" buildings, consisting of wooden framework, covered externally with corrugated iron and lined internally with match boarding. The largest and oldest group contains the kitchen, a dining room for the nurses, and two wards, containing 12 beds each. There are two annexes, and a portion of the original building, which provides a room used as a dining room for the domestic staff, and also sleeping accommodation for some of them. There are three other blocks of somewhat smaller size, each containing two wards and a ward kitchen. In the laundry block, besides the laundry proper, which is provided with proper machinery and drying closets, there is a disinfecting station, provided with a Washington-Lyons disinfector of the largest size. Another detached building contains a coach-house, mortuary, etc. An entirely independent and separate block is situated at a distance from the Hospital and in the middle of the grounds. This was erected originally as a Small Pox Hospital, and contained two small wards, a kitchen, and two bedrooms. Owing to the pressure in the accommodation and the increase in the staff, it was found necessary to adapt this building just before the war as a Nurses' Dormitory. It will shortly cease to be used for this purpose, and after the necessary alterations will be used, in two distinct portions, for an Observation Block and for a Discharge Block, which has long been wanted. The Nurses will be transferred to new quarters close to the other buildings, which are being provided in a hut which was erected for the reception of military patients during the time that the Highland Territorial Brigade was in Bedford. These alterations will make a great improvement in the Hospital, but they can only be regarded as temporary. Experience has shown that buildings of a temporary character are, in the long run, expensive, and in need of repair, and they are lacking in many of the conveniences of a thoroughly planned permanent hospital. This fact was realized before the war, and in the early part of 1914 the Surveyor, by direction of the Public Health Committee, prepared complete plans for an

administrative block (then, as now, the most urgent need), suitable not only for present use, but for the needs of a thoroughly modern and efficient Isolation Hospital. The matter was under the serious consideration of the Committee when the outbreak of war put a stop to all hopes of carrying the plan out, and it is to be feared that in the present state of affairs as to material and labour, and the heavy rates with which the town is burdened, it will be some time before the project can be resumed.

The drainage system is connected with the town sewers, and the Hospital is lighted throughout by electricity.

The number of beds available in the Hospital is 72, distributed as follows:—For Scarlet Fever, 40; for Diphtheria, 32. The staff during the year was composed as follows:—The Matron, — Staff Nurses, — Probationers, Cook, Housemaid, 2 Ward Maids, 2 Laundresses, Needlewoman, and Porter. There is also an Engineer in charge of the laundry machinery and boilers, and of the disinfectors.

There was considerable difficulty during the year in maintaining the numbers of the Nursing Staff.

Miss Williams, who had been Matron since 1914, having decided to retire from the nursing profession, resigned her post in July last. It is difficult to speak too highly of the great services rendered to the Hospital by Miss Williams during her tenure of office, she having reorganised it most efficiently, as regards both staff and upkeep.

Miss McGrowther was appointed in 1919 as Matron in succession to Miss Williams.

GENERAL ADOPTIVE ACTS.

Those in force in the Borough are:—

Baths and Wash-houses Act, 1846.

Public Libraries Act.

Housing of the Working Classes Act; Part II. adopted.

Public Health Acts Amendment Act, 1907. Sections 15-27 inclusive. Sections 29-33 inclusive; comprised in Part II. Sections 34-47 and 49 and 57 in Part III. Sections 52-60 and 62-66 in Part IV. Part V. Part VI. Part X. Notification of Births Act, 1907.

LABORATORY.

During the war the work of the Laboratory was much reduced and has not yet regained its former standard. Weekly bacteriological examinations were, however, made of the filtered water in the two Service Reservoirs. The number of swabs and specimens of sputum examined is now again increasing.

GENERAL HOUSING CONDITIONS IN THE DISTRICT.

The estimated number of houses in the Borough in October, 1919, was 9,560. Of these, 7,000 were of £20 rental and under, 5,270 being of £16 rental and under. This last figure, therefore, may be taken as the number of working class houses.

No houses of any class were built during the year; nor are any in course of erection.

The population in the middle of 1919 was estimated by Mr. C. E. Craddock, the Rate Collector, as 41,344, and this estimate is probably very near the mark. The town at the end of the year contained only a very few soldiers, and in so far has now reverted to its pre-war conditions; at one period of the war the population, including the troops, was somewhere about 60,000.

It is not likely that the population of the town will increase very rapidly, unless some large manufacturing concern should come to the neighbourhood.

The estimate of the number of new houses required to satisfy the Government Housing Scheme was 400, but so far, though much time and work has been spent on the scheme, nothing has been done owing to the extreme difficulty of finding the necessary funds.

OVERCROWDING.

There is no doubt that there has been and still is much overcrowding in the town; the Rate Collector estimates that about 100 houses are each occupied by two (or even in some instances) three families. In the smaller houses extra accommodation has often been made by utilizing the parlour as a living room for constant use. During the war the common cause of overcrowding was that wives came from other districts to be near their husbands, who were quartered in the town; another cause was the influx of men employed on war work at the engineering firms, and a large airship factory, which was established about two to three miles from the town. It was impossible to do much to remedy this state of affairs, as it would have been futile to turn people out who had nowhere else to go. The difficulty now, however, is not so acute. The Sanitary Inspector investigated 150 cases, but in only 30 instances was the overcrowding excessive.

Though the demand for new houses exists in Bedford as elsewhere, the needs of the town are not so urgent as those of many other places. The greater part of the houses in the borough have been built within the last forty years, many of them within the last fifteen. But for the war there is no doubt the demand for middle class and superior artizan dwellings would have been adequately

and satisfactorily met by the local builders. The great want of the town was, and is, that of cottages for the labouring class that could be let at rents within the power of those classes to pay. No scheme can be satisfactory that does not provide for their needs. Were it possible, which it is not, in view of the financial situation of the Borough, to embark upon a scheme of reconstruction of the older districts in the centre of the town, then the first step should be to pull down certain groups of old cottages and replace them by good modern ones; there is plenty of space, and the opportunity could be taken to widen existing streets, and perhaps to open out new ones to relieve the dangerously congested traffic in the centre of the town. There is a good deal of ground in the very heart of the town which is practically dead for business purposes, but which would be capable of development, though at the same time in its present condition it is not insanitary, but merely lifeless. The houses in the older part of the town vary in character, according to the date of the building, and many possess gardens of considerable size. Even in the case of cottage property there is, as a rule, a sufficiency of open space about the houses; on the other hand, some of the business premises in the main streets are unduly cramped for room. In the newer parts of the town the streets are straight and wide, and many of them have been planted with trees, which add greatly to their appearance. The more highly rated houses are mainly of the villa or semi-detached villa type. They are well planned and modern in character. Besides these there are a great many streets consisting of houses suitable for families of moderate means. They generally consist of a ground floor and upper storey, and have no basements. Except in the central part of the town there are no houses with basements. The accommodation for the working classes is good: the houses contain, as a rule, a front parlour, a "living room," furnished with a kitchen range, a wash-house or scullery, and outside offices; and upstairs two, or generally three, bedrooms. Passages run at intervals between the houses to give access to the backyards; the space behind the houses is wide, and the drains are so laid that they run to the back, and are taken out to the street beneath the side passages. In all streets built within the last twenty years inspection chambers have been systematically introduced at all points where a change in the direction of the drain occurs. In the newer streets there has been an increasing tendency to provide the better houses of this class with bathrooms.

In judging any housing schemes in reference to Bedford it should always be borne in mind that the town fortunately possesses many of the advantages sought in "Garden Cities." It is of moderate size, with ready access to the country on all sides; it is happy in the possession of a beautiful river, to which the town owes most of its charm; and it has a large park and two large recreation grounds, besides smaller open-air spaces. Owing to the great demand that arose for garden plots during the war, the amount of

allotment ground has been lately very greatly increased, and the demand seems likely to increase further. It is doubtful whether the proposed increase of the ground to be attached to houses, obtained by the limitation of 12 houses to an acre, would lead to such good gardening as the system of allotments. Many of the houses at present have garden plots of seven or eight poles, but as a rule little use is made of the ground, which serves as a rubbish depôt rather than a garden; and the chief use of the "gardens" is that in the aggregate they serve as open-air spaces. It is a question whether they could not be put to better use as common recreation spaces for the houses they serve; but the question of maintenance and expense at once arises.

I have reported to the Council in accordance with the provisions of the Housing of the Working Classes Act, 1890, Part II., Sec. 30, the particulars of 71 houses (containing 197 inmates) which "appear" to me "to be in a state so dangerous or injurious to health as to be unfit for human habitation." But at the present moment the matter can go no further, as there are no houses available for the inmates if their present abodes are demolished. All these houses belong to the cottage class, and I cannot too strongly emphasize that it is this class of house that is wanted first and foremost; and further, that any scheme of improvement and social betterment that does not make the raising of the living standard of the *poorest class* its main and fundamental object will not accomplish its aims.

The condemned houses are old, and many of them indifferently built. The rooms are small and low ceiled; the staircases narrow and steep; there is no proper storage place for food; there is want of proper washing accommodation; there are generally only two bedrooms. The roofs and gutterings are defective; the walls are often damp from want of a damp course, causing the plaster to rot and drop; the window frames are generally very old, and in many cases the windows will only open at the bottom, and in a very few instances there is no indoor water supply, but several houses depend on a common tap. A few of the houses are also "back to back," or have no through ventilation.

For the sanitary work carried out in this class of case under the Housing Acts see the Appendix.

The difficulties in dealing with houses requiring to be made habitable, though not unfit for habitation, have been very great, owing to shortage of material and labour.

The majority of houses of the poorer class have, in Bedford, separate closet accommodation, with constant water supply; the exceptions are given in the Appendix. Since 1910, 3,277 galvanized iron dustbins have been provided in place of the old miscellaneous receptacles formerly in use.

Bedford is fortunate in having no unhealthy *areas* within the meaning of the various Acts.

BY-LAWS RELATING TO HOUSES.

The building and other by-laws are, on the whole, satisfactory, and in some respects in advance of the requirements of the Ministry for the proposed housing schemes. New by-laws are required to deal with the conversion of existing houses into flats or tenements, as it seems probable that shortly many houses may be so converted, and the existing by-laws dealing with Houses let in Lodgings do not apply to the more highly rented houses.

APPENDICES.

(Statistics for the 12 months ended 31st December, 1919).

- (1) Numbers of dwelling houses in respect of which complaints were made by householders that they were unfit for human habitation—None.
- (2) Action under Section 17 of the Housing Act of 1909:—
 - (a) Number of dwelling houses inspected under and for the purposes of the Section—109.
 - (b) Number of dwelling houses which were considered to be unfit for human habitation—71.
 - (c) Numbers of dwelling houses, the defects in which were remedied (or are in course of remedy [33])—38.
- (3) Action under Section 28 of the Housing Act, 1919—Nil.
- (4) Closing Orders—Nil.
- (5) Demolition Orders—Nil.
- (6) Number of dwelling houses demolished voluntarily—Two.
- (7) Obstructive Buildings. None dealt with under the Acts, but two large houses purchased and demolished by the Corporation, to render safer the approach to the Railway Station.
- (8) The work of inspection has been carried out by the Chief and one Assistant Inspector.

I am, Ladies and Gentlemen,

Your Obedient Servant,

F. B. WILLMER PHILLIPS,
M.A., M.D. (Oxon.); D.P.H. (Camb.);
B.Sc. (Lond.).

May, 1920.

Causes of Death in the Borough of Bedford during the year 1919.

CAUSES OF DEATH.					MALES.	FEMALES.
All Causes					211	265
1. Enteric Fever						1
2. Small Pox						
3. Measles						4
4. Scarlet Fever						
5. Whooping Cough					1	
6. Diphtheria and Croup					1	3
7. Influenza					9	15
8. Erysipelas						
9. Pulmonary Tuberculosis					16	12
10. Tuberculous Meningitis					1	4
11. Other Tuberculous Diseases					4	3
12. Cancer, Malignant Disease					34	31
13. Rheumatic Fever						3
14. Meningitis						3
15. Organic Heart Disease					14	21
16. Bronchitis					9	22
17. Pneumonia (all forms)					7	15
18. Other Respiratory Diseases					4	3
19. Diarrhoea, &c. (under 2 years)					3	1
20. Appendicitis and Typhlitis					2	1
21. Cirrhosis of Liver					1	1
21A. Alcoholism					1	
22. Nephritis and Bright's Disease					9	8
23. Puerperal Fever						
24. Parturition, apart from Puerperal Fever						2
25. Congenital Debility, &c.					12	9
26. Violence (apart from suicide)					9	4
27. Suicide... ..					4	3
28. Other defined diseases					69	95
29. Causes ill-defined or unknown					1	1
Special causes (included above)						
Cerebro-spinal Fever						1
Poliomyelitis						
Deaths of Infants under 1 year of age						
Total... ..					25	16
Illegitimate					5	5
Total Births					285	303
Legitimate					253	274
Illegitimate					32	29
Population for Birth Rate					41686	
Population for Death Rate					40017	

BEDFORD URBAN SANITARY AUTHORITY.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1919.

(Civil and Military.)

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.							
	At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and up- wards.
Small-pox .. .. .	..	..	..	..	..	..	..	..
Diphtheria (and Membranous croup)	35	..	6	21	3	5	..	..
Erysipelas	6	1	..	..	..	2	2	1
Scarlet fever	123	..	19	78	21	4	1	..
Typhus fever .. ..	..	..	..	..	..	..	..	..
Typhoid fever	1	..	..	..	..	1	..	..
Paratyphoid fever	29	..	..	..	28	1	..	..
Puerperal fever	1*	..	..	..	..	1	..	..
Cerebro-spinal Meningitis..	..	..	..	..	..	..	..	..
Poliomyelitis .. ..	..	..	..	..	..	..	..	..
Ophthalmia Neonatorum ..	18	18	..	..	..	..	..	..
Measles	244	1	24	174	39	6	..	..
Rubeola (German measles)	276	2	21	150	74	26	3	..
Chicken pox.. .. .	126	3	12	92	15	4	..	..
Acute primary pneumonia..	13	..	..	2	2	5	2	2
Acute broncho „ ..	2	..	1	1	..	..	..	..
Acute influenzal „ ..	13	..	..	3	2	3	4	1
Malaria	10	..	..	..	4	6	..	..
Dysentery	2	..	..	..	..	2	..	..
Pulmonary Tuberculosis ..	49	..	..	..	18	23	7	1
Other forms of Tuberculosis	14	..	4	5	3	2	..	..
Totals	962	25	87	526	209	91	19	5

* Non-Resident.

Birth-rate, Death-rate and Analysis of Mortality during the year 1919.
(Provisional figures, Population estimated to the middle of 1919, have
been used for the purposes of this Table.)

	Birth- rate per 1,000 total popu- lation	ANNUAL DEATH-RATE PER 1,000 CIVILIAN POPULATION								RATE PER 1,000 BIRTHS		PERCENTAGE OF TOTAL BIRTHS			
		All causes	Enteric fever	Small-pox	Measles	Scarlet fever	Whooping cough	Diphtheria	Violence	Diarrhoea and enteritis (under 2 years)	Total deaths under 1 year	Deaths in public institutions	Certified causes	Inquest cases	Uncertified causes of death
England and Wales	18.5	13.8	0.01	0.00	0.10	0.03	0.07	0.13	0.47	9.59	89	23.9	92.5	6.2	1.3
96 great towns, including London (Census popula- tion exceeding 50,000) ..	19.0	13.8	0.01	0.00	0.13	0.04	0.07	0.14	0.45	12.24	93	29.2	92.3	6.9	0.8
148 smaller towns (Census populations 20,000—50,000)	18.3	12.6	0.01	0.00	0.10	0.03	0.08	0.12	0.39	8.67	90	16.6	93.6	4.9	1.5
London	18.3	13.4	0.01	0.00	0.08	0.03	0.05	0.18	0.47	16.22	85	44.7	91.2	8.6	0.2



Borough of Bedford.

REPORT

OF THE

SANITARY INSPECTOR

for the Year 1919.

PUBLIC HEALTH DEPARTMENT,

SANITARY INSPECTOR'S DEPARTMENT,

TOWN HALL, BEDFORD,

March, 1920.

*To the Chairman and Members of the Public
Health Committee.*

Ladies and Gentlemen,

As Sanitary Inspector to your Authority, I have the honour to submit to you my TWENTY-FIRST ANNUAL REPORT showing the work done in this Department during the year ending December 31st, 1919.

I am,

Yours faithfully,

ALFRED WALLACE MERRIE,

Sanitary Inspector.

SUMMARY.

No. of House Drains tested on payment of fee	...	...	96
No. where defects were found	...	...	40
No. of Schools and Boarding House drains tested on payment of fee	...	...	47
No. where defects were found	...	...	3
No. of House Drains tested on complaint	...	...	27
No. where defects were found	...	...	7
No. of House Drains examined after Notification of Infectious Disease	...	...	128
No. where defects were found	...	...	5
No. of re-tests made after drain repairs	...	...	223
No. of Nuisances reported or discovered	...	...	527
No. of visits of Inspection <i>re</i> Abatement of Nuisances, &c.	...	...	1970
No. of Houses inspected under Housing and Town Planning Act, 1900 (Sec. 15)	...	...	109
No. of Houses require cleansing, &c.	...	...	38
No. of Houses require repairing, &c.	...	...	38
No. of Houses requiring reconstruction or demolition	...	...	71
No. of Houses and Drains inspected under Public Health Act, 1875	...	...	796
No. of Houses require cleansing	...	...	68
No. of Houses require repairing	...	...	231
No. of Houses require paving, &c.	...	...	34
No. of Overcrowding investigated	...	...	150
No. of Houses overcrowded	...	...	30
No. of Notifications of Infectious Disease	...	...	900
No. of Patients removed to the Isolation Hospital	...	...	141
No. of Rooms disinfected	...	...	250
No. of Houses require internal cleansing after Infectious Disease	...	...	16
No. of Articles put through the Steam Disinfector (Civilian)	...	...	3542
No. of Articles put through the Steam Disinfector (Military)	...	...	2964
No. of Soldiers having Hot Disinfecting Baths	...	...	15
No. of Visits to outworkers' premises...	...	...	50
No. of Nuisances, &c., found at same	...	...	1
No. of Visits to Common Lodging Houses	...	...	150
No. of Houses without ashbins	...	...	210
No. of Houses with rain water pipes direct to drains	...	...	41
No. of Visits to Houses let in lodgings	...	...	50
No. of Visits to Slaughter Houses	...	...	3650
No. of Visits to Cowsheds and Milk Vendor's Premises	...	...	126
No. of Samples taken under Food and Drugs Acts	...	...	78
No. found adulterated	...	...	6
No. of preliminary notices served to abate	...	...	814
No. of statutory notices served to abate	...	...	310
No. of Legal Proceedings taken under Public Health Act	...	...	0
No. of Legal Proceedings taken under Food and Drugs Act	...	...	0

The following tables show the number of notices served under the various Acts :—

PRELIMINARY NOTICES, 1919.

Nuisances.	Cleansing.	Over-crowding.	P. H. A. 1875. Sec. 36.	P.H.A.A.A. 1907. Sec. 37.	P.H.A.A.A. 1907. Sec. 25.	Totals.
427	81	30	210	41	19	808

STATUTORY NOTICES, 1919.

Nuisances.	Cleansing. P.H.A., 1875 Sec. 46.	P.H.A. 1875. Sec. 36.	P.H.A.A.A. 1907. Sec. 37.	P.H.A.A.A. 1907. Sec. 25.	Housing & Town Planning Act. Sec. 15, 17, 18.	Total.
86	41	100	37	8	38	310

One closed voluntarily.

AT PRESENT UNABATED, BUT WORK IN HAND, 1919.

Nuisances.	Cleansing. P.H.A., 1875, Sec. 46.	P.H.A. 1875. Sec. 36.	P.H.A.A.A. 1907. Sec. 25.	Housing & Town Planning Act. Sec. 15 & 17.	Total.
14	11	50	4	13	92

NOTE.—The outstanding notices unabated in 1918 have been complied with. Those for 1919 will be abated as soon as tradesmen can do the work. Orders have been given for them to do it.

HOUSE TO HOUSE INSPECTION (P.H.A. 1875).

796 houses have been inspected, and I have called the attention of the Medical Officer of Health to 68 houses, 16 of which were inspected after Infectious Disease, in which more or less internal cleansing was necessary.

The usual notices under Section 46, Public Health Act, 1875, were served and complied with.

OVERCROWDING.

150 cases were investigated. The fact that it is impossible to get houses owing to the great dearth of housing accommodation, many houses have more inmates in them now than in pre-war time. The front rooms (parlours) have been made into bedrooms and bed sitting rooms, so that the actual sleeping rooms are not so much overcrowded as would appear from the number of persons found in the house, for in only 30 instances excessive overcrowding of bedrooms were discovered and abatement of the nuisances insisted upon, and the dispossessed persons no doubt went and crowded other houses.

There are about 100 houses in the town with two families living in them, not all of them being of the artisan class.

HOUSING AND TOWN PLANNING ACT, 1909.

During the year, 109 houses have been inspected under this Act.

At 38 houses, more or less work was required to be done to put them in a state fit for human habitation.

Vide Table showing sanitary work carried out.

71 houses were scheduled for demolition or reconstruction, and will be dealt with as soon as other suitable accommodation is obtainable for the inmates.

The following gives situation of these houses : —

Number of Houses.	Situation.	Inmates.		Totals
		Adult.	Children.	
6	Butcher's Yard.....	10	4	14
12	Bell Court.....	30	22	52
3	St. John's Street	2	1	3
2	London Road	5	4	9
4	Ram Yard.....	6	0	6
14	St. Cuthbert's Square	19	3	22
1	Parradine Court	1	0	1
7	Queen's Row.. ..	13	18	31
4	Tavistock Place.....	2	2	4
6	Saddler's Court.....	9	8	17
8	Chandos Street.....	8	10	18
4	Gravel Lane	7	13	20
71		112	85	197

THE NUMBER OF HOUSES ALREADY CLOSED IS SHOWN AS FOLLOWS :

During the Years 1905 to 1919.				
Locality.	No. Closed.	Rent Paid per week.	No. of Inmates.	No. Demolished.
Bell Court	3	2/6 to 3/3	19	2
Parish Court	4	1/4 to 1/8	16	4
Chandos Street	4	2/- to 2/3	13	4
Spring Gardens	8	1/11 to 3/-	19	8
Gravel Lane	3	3/3	22	0
Christie Court	10	1/6 to 3/-	27	10
Graham's Yard	5	"	12	0
Paradine Court	7	"	20	7
Malden's Yard	8	"	40	8
Castle Hill	2	2/-	7	2
Newnham Street	2	2/6	8	2
Gravel Lane	4	2/4	18	4
Priory Street	3	2/-, 2/3 & 2/9	6	3
Cardington Road	1	5/3	5	1
Tavistock Place	10	2/10	32	10
* Balsall Street	1	3/-	2	1
* St. John's Street	1	3/6	2	1
* Stanley Street	1	£18	5	0
* Midland Road	2	£30	0	2
* Hurst Grove	26	£20	120	0
Newnham Street	3	2/6 to 3/6	17	0
Hand Court	13	3/- to 4/-	41	0
Amphill Street	4	2/7 to 3/3	12	4
Totals	125		436	74

No closing or demolition orders were made in 1919, but two, Balsall Street and St. John's, were voluntarily closed and demolished.

* Stanley Street, after being empty for some time, was converted into a workshop.

* The two in Midland Road were demolished by the Authority for the purpose of widening the road at a dangerous corner.

* The 26 in Hurst Grove were bought and converted into offices by Messrs. W. H. Allen, Sons and Co., Ltd., during the war.

HOUSES IN THE BOROUGH WITHOUT SEPARATE W.C. ACCOMMODATION.

In 1919 there were 145 houses with 71 w.c.'s. At present there are 126 houses with 62 w.c.'s.

Allhallows Lane	...	...	2 w.c.'s to	4 houses.
Allhallows Lane	...	...	3	5
Allhallows Lane	...	...	1	2
Beauchamp Row	...	...	1	2
Beauchamp Row	...	...	1	2
Beauchamp Row	...	...	1	2
Bell Court	...	...	2	4
Bell Court	...	...	2	4
Butcher's Yard	...	...	2	6
Castle Hill	...	...	2	3
Chandos Street	...	...	2	3
Chandos Street	...	...	3	6
Chandos Street	...	...	1	2
Chandos Street	...	...	1	2
Gravel Lane	...	...	2	4
Greenhill Street	...	...	2	5
Hassett Street	...	...	3	5
Ram Yard	...	...	1	2
Richbell Court	...	...	3	7
Rose Cottages	...	...	3	7
Sadler's Court	...	...	3	6
St. Cuthbert's Square	...	...	6	12
St. John's Place	...	...	5	10
Thurlow Street	...	...	3	5
Tower Court	...	...	1	2
Tavistock Place	...	...	1	3
Tavistock Place	...	...	2	4
Tavistock Place	...	...	1	2
Tavistock Place	...	...	1	3
Union Street	...	...	1	2
Total	...	...	62	126

In 2 instances there are	3 houses to	1 w.c.
In 2	5	2 w.c.'s.
In 2	7	2 w.c.'s.
In 3	3	2 w.c.'s.
In 2	5	3 w.c.'s.

The remaining houses have 1 w.c. to 2 houses.

The accommodation for the above houses is sufficient for the needs of the occupiers, although they would prefer to have separate ones, but this cannot be enforced.

HOUSES NOT CONNECTED TO THE SEWAGE SYSTEM.

Pail Closets.		Earth Closets.		Cesspools.		Midden.		Septic Tank.	
1919.	1912.	1919.	1912.	1919.	1912.	1919.	1912.	1919.	1912.
4	4	7	16	6	6	3	3	1	1

NUISANCES.

The 427 Nuisances discovered or reported at the office (including those found during house-to-house inspection) were of a varied nature, and with the exception of the number shown in the last table have been abated.

In addition, in 100 instances verbal intimation to persons responsible for minor nuisances was sufficient to procure the abatement thereof.

13 complaints were received at the office in respect to bad smells emanating from street sewers. These complaints were at once handed to the Borough Surveyor, who had the matter investigated.

In 24 instances complaints were received from householders relative to the non-removal of house refuse. These were at once communicated to the Borough Surveyor, who had them attended to.

DRAIN TESTING.

96 request house drains were tested, and the sanitary fitments reported upon, for which £55 was received and paid into the District Fund. At 40 defects of more or less serious nature were found. In 11 instances a new 4 in. drain was laid under modern conditions, 8 intercepting traps being fixed. The defects at the other houses were remedied and passed after re-testing.

27 drains were tested on complaint, and in 7 instances were found defective, 14 of them were relaid, and 13 were repaired.

128 drains were examined after notification of Infectious Diseases in the house, and in 5 instances were found defective and remedied. The defects were not of such a serious nature as to be the probable cause of the disease in the house.

PUBLIC AND PRIVATE SCHOOLS.

47 drains of the Schools and Boarding Houses in connection with the Schools were tested and a report sent to the Governors and Boarding House Masters. Defects were found in 4 instances and were remedied.

The same inspection was made at the Kindergarten and other Schools, 3 defects being found, which were remedied.

£27 10s. od. was received for this work and paid to the District Fund.

SANITARY DUST BINS.

210 notices to provide proper Galvanised Iron Dust Bins have been served, and in 160 cases these dust bins have been provided; but it is still a matter of difficulty to procure them promptly.

Since 1910, 3,277 Dust Bins have been provided, in lieu of old boxes, &c.

COWSHEDS AND MILKSHOPS.

At the end of 1919 the Register contained the names of persons keeping 2 Cowsheds and 25 Milkshops, together with the names of 37 purveyors of milk. 14 of the latter reside outside the town, but retail milk within the Borough.

The Food Inspector has on 126 occasions visited the premises of Cowkeepers and Milk Vendors. (See Report of Medical Officer of Health).

SLAUGHTER HOUSES.

The Slaughter Houses in the Borough number 22, yearly licences being granted by the Authority to 18. The Food Inspector has made 3,650 visits to them. (See report of the Medical Officer of Health).

INFECTIOUS DISEASES.

During the year 900 notifications of Infectious Disease were received by the Medical Officer of Health.

The houses were visited, and the circumstances surrounding the cases entered in the Register for the information of the Medical Officer of Health.

250 rooms were disinfected, and 3,542 articles put through the Steam Disinfector. The Steam Disinfector was also used by the Military, 2,964 articles of clothing, bedding, blankets. being disinfected, and 15 soldiers had hot disinfecting baths.

£97 15s. 10d. has been received during the year from the Military for its use, which sum has been paid into the District Fund.

ISOLATION HOSPITAL.

23 civilian patients paid during the year £131 3s. 4d., which sum has been paid into the District Fund.

OFFENSIVE TRADES.

There are 3 offensive trades carried on in the Borough, viz., Frying of Fish, Rag and Bone Dealing, and Storing of Hides, Skins, and Fat.

The following are the situations where "offensive trades" are carried on in the Borough:—

FISH FRYING (12).	RAG AND BONE (4).	HIDES & SKINS (2).
26, Ford End Road.	Gwyn Street.	Gwyn Street.
66, Iddesleigh Road.	Beckett Street.	Roise Street.
2, Harpur Street.	Hassett Street.	
59, St. John's Street.	Midland Road.	
37, Muswell Road.		
37, Park Road E.		
62, Tavistock Street.		
108, Greyfriars Walk.		
1, Great Butts St.		
34, Denmark Street.		
22, Broadway.		
2, Althorpe Street.		

The Bye-Laws regulating these premises have been observed, and very few complaints have been received. There have been, as a rule, complaints of smells generally in Summer time on Sundays, when butchers have brought bones to the place on Saturday night, so as not to have the smells in their own slaughter houses or shops during Sundays.

HOUSES LET IN LODGINGS.

There are 36 houses, with 90 rooms, on the Register. 60 visits of inspection have been made to them, and they are kept in a fairly good sanitary condition.

COMMON LODGING HOUSES.

The Common Lodging Houses on the register number 4, with 96 beds, 2 being houses which are also licensed for the sale of intoxicants.

Numerous visits of inspection have been made by myself, and in company with the Medical Officer of Health, and no fault could be found with the manner in which we found them conducted.

The rooms and bedding, etc., are kept in a clean condition, and the statutory linewashing of the premises being observed.

No case of infectious disease was found among the inmates of the houses, though 1 case of Phthisis was notified of a person who had gone to the Union from one of these houses.

The following are the names of the houses, the number of beds in each house, and the number of persons who stayed in the houses during the year 1919, as shown by the weekly return:—

8A, Tavistock Place.				"The Cock."	
6 Rooms. 50 Beds.				4 Rooms. 22 Beds.	
1919.	Males.	Females.	Total.	Males.	Total.
1st Qr.	1363	294	1657	676	676
2nd Qr.	1289	273	1562	852	852
3rd Qr.	1338	273	1611	898	898
4th Qr.	1258	273	1531	991	991
Totals	5248	1113	6361	3417	3417
Average per night .. 17·4				Per night .. 9·3	

"The Royal Oak."			"The White Hart."		Totals.		
4 Rooms. 17 Beds.			2 Rooms. 7 Beds.		For 96 Beds.		
1919.	Males.	Total.	Males.	Total.	Males.	F'm'l's.	Total.
1st Qr.	512	512	572	572	3123	294	3471
2nd Qr.	498	498	564	564	3203	273	3476
3rd Qr.	308	308	382	382	2926	273	3199
4th Qr.	261	261	557	557	3067	273	3340
Totals ..	1579	1579	2075	2075	12319	1113	13432
Average per night .. 4·3			per night .. 5·0		per night .. 36·8		

1917....20904 Males ; 1024 Females ; Total 21928.

1918....14042 ,, 924 ,, ,, 14966.

A total decrease from the numbers of the previous year of 6,962, viz., 6,862 males and 100 females.

STATUTE FAIRS.

The dwelling vans of the Showmen who visit the Town for the purpose of attending these fairs were all inspected.

No cases of sickness were discovered among the occupiers. The condition of the vans was satisfactory, though I believe some of them were overcrowded at night.

SANITARY WORK CARRIED OUT.

	Public Health Act.	Housing and Town Planning Act.	Factory and Workshop Act.
No. of Workshops cleansed			2
No. of Outworkers' Premises cleansed ...			9
No. of Bakehouses cleansed			10
No. additional Lavatory Accommodation provided			2

	Public Health Act.	Housing and Town Planning Act.
No. of Cowsheds limewashed	4	
No. of Slaughter Houses limewashed	120	
No. of rooms in Common Lodging Houses limewashed	242	
No. of rooms in Houses let in Lodgings cleansed...	65	

DRAINS.

No. found blocked and cleared	72
No. flushed	72
No. found defective	58
No. repaired	24
No. wholly relaid	34
No. removed from inside houses	0
No. of intercepting traps fixed	14
No. of intercepting traps repaired	0
No. of intercepting traps stoppers fixed	12
No. of chambers and manholes built	52
No. of new covers to manholes	55
No. of fresh air inlets fixed	8
No. of fresh air inlets repaired	10
No. of soil and vent pipes fixed	3
No. of soil and vent pipes repaired	57
No. of soil pipes removed from houses	0
No. of new gullies provided to sinks	11
No. of insanitary traps abolished	0
No. of rain water pipes disconnected	41
No. of rain water tanks cleared out	33
No. of rain water tanks made to overflow gullies...	5

SANITARY WORK CARRIED OUT.—*Continued.*

	Public Health Act.	Housing and Town Planning Act.
YARDS, ETC.		
No. of yards paved	5	28
No. of yard paving repaired	9	30
No. of right of ways gravelled and levelled	0	10
No. of division walls and fences repaired	0	6
No. of gates repaired	0	4
No. of ashbins provided	50	0
Animals and fowls improperly kept	12	10
Manure and other offensive matter removed	20	8
Manure pits rebuilt or repaired	1	0
HOUSES.		
No. of rooms and staircases cleansed	236	120
No. of inside walls repaired	236	120
No. of verminous rooms fumigated	5	35
No. of damp walls remedied	6	90
No. of house floors relaid or repaired	20	120
No. of window cords repaired	35	22
No. of window frames repaired and made to open	20	71
No. of bedrooms ventilated	25	60
No. of firegrates and fireplaces repaired	3	40
No. of new doors fixed	4	14
No. of doors repaired	35	45
No. of splashboards fixed to doors	6	10
No. of cupboard doors repaired	30	20
No. of cupboards cleansed	76	54
No. of pantries cleansed	26	29
No. of pantries repaired and ventilated	18	20
No. of coppers repaired	5	20
No. of water service pipes repaired	50	37
No. supplied with separate service	0	19
No. of sinks fixed	2	14
No. of sinks repaired	16	3
No. of new waste pipes fixed	6	20
No. of waste pipes repaired	25	6
No. of sink and bath waste pipes trapped	31	0
No. of outside walls repaired	0	39
No. of roofs repaired	43	30
No. of spoutings repaired	50	26
No. of chimney heads repaired	0	19
No. of outside passages limewashed	0	4

SANITARY WORK CARRIED OUT.—*Continued.*

	Public Health Act.	Housing and Town Planning Act.
W.C.'s, ETC.		
No. of defective w.c.'s repaired	15	20
No. of w.c.'s rebuilt	0	14
No. of new pedestal pans fixed	10	30
No. of hopper pans fixed	3	2
No. of filthy pans cleansed	27	30
No. of pan closets removed	0	0
No. of w.c. seats repaired	20	22
No. of w.c. cisterns repaired or fixed	120	20
No. of floors relaid	12	22
No. of w.c. doors repaired	22	20
No. of lights provided to w.c.	14	22
No. of ventilators fixed to w.c.	14	22
No. of w.c. walls cleansed	30	14
No. of w.c. roofs repaired	30	20
No. of w.c. spoutings provided or repaired		
No. of earth closets converted to water closets	0	0
No. of middens converted to earth closets	0	0
No. of cesspools abolished and drained to sewer	0	0
OUTHOUSES.		
No. of defective ones repaired or rebuilt	10	15
No. of floors relaid and repaired	3	20
No. of doors repaired	20	0
No. of walls cleansed	20	15
No. of roofs repaired	19	15
No. of spoutings provided or repaired	19	15
No. of stable floors relaid	2	0

It may be thought, on perusal of the above table of sanitary work carried out, that many of the items are of a small or trivial nature, but small sanitary defects have a greater influence upon the health of the community than many persons realise. Bacteriology has shown us what a menace to health small things can be.

Broken window cords, for instance, do not allow of the windows being open; this means foul air in the room; foul air may predispose the inhaler to consumption, and repaired window cords may mean fresh air and good health.

Complaints are received that there are bad smells arising from defective drains about the house; on investigation the drains are found sound, but the gullies are dirty, and the waste pipes foul, and vitiated air passing up untrapped and foul waste pipes in the house may be the primary cause of disease in those inhaling it.

Damp walls, from the surface of the garden being above the damp course, and the air gratings covered; result, dry rot and bad smells under the floor. Loose paving around sink gullies, allowing soakage in the earth, a warm day, children playing around the gully, and diarrhoea is the result; and so on. It often requires a deal of proving before a complaining householder is convinced that the smells they have experienced have not been from defective drains, but from other sources.

FOOD AND DRUGS.

76 samples of Food and Drugs have been purchased during the year, and submitted to the Public Analyst for the purpose of analysis.

70 samples were certified as genuine, and 6 samples as adulterated.

For detailed Tables, see Report of the Medical Officer of Health.

FACTORY AND WORKSHOPS ACT, 1901.

The Tables in the report of the Medical Officer of Health have been compiled from the Registers which are kept as required by Section 131. At the end of the year there were 619 Factories, Workshops, Workplaces, and Domestic Workrooms on the Register, of which the following list shows the different occupations.

Occupation.	Factories, etc., where Motive Power is used.	Workshops.	Domestic Workshops.	Outworkers.	Workplaces.
Dressmakers, Milliners, Mantle Makers, Costumers etc.	1	93	34	10	..
Tailors .....	..	36	39	54	..
Boot and Shoe Repairs ..	1	25	29	40	..
Builders, Carpenters, and Cabinet Makers	7	26	3	..	3
Printers	18	..	..	..	..
Motor and Cycle Repairs, etc.	6	22	1	..	..
Marine Stores .....	..	..	..	..	4
Painters .....	..	11	..	..	..
Plumbers .....	..	27	..	..	..

Factories and Workshops Table.—*Continued.*

Occupation.	Factories, etc., where Motive Power is used.	Workshops.	Domestic Workshops.	Outworkers.	Workplaces.
Upholsterers .....	..	6	3	8	..
Coach Builders and Wheelwrights	1	9	..	..	..
Chaff Cutters	5	..	..	..	2
Sugar Boilers .....	..	2	..	..	..
Cab Yards .....	..	..	..	..	11
Laundries.....	3	3	..	..	..
Watch Makers .....	..	12	8	..	..
Breweries	5	..	..	..	..
Shoeing Smiths .....	..	..	..	..	3
Electro Platers	1	1	..	..	..
Wood Turners.....	2	..	..	..	..
Bedding Manufacturers..	1	..	..	..	..
Rope Makers .....	..	..	..	..	1
Engineers	14	3	..	..	..
Masons' Yards.....	1	2	1	..	..
Sale Yards .....	..	..	..	..	2
Coal Yards .....	..	..	..	..	3
Dyers	1	..	2	..	..
Gunsmiths .....	..	2	..	..	..
Aerated Water Manufacturers	3	1	..	..	..
Picture Frame Makers ..	..	1	..	..	..
Millers	3	..	..	..	..
Card Board Box and Bag Makers.....	..	1	..	..	..
Photographers .....	..	5	3	..	..
Wood Cutters	3	1	1	..	1
Bat Works ..	1	..	..	..	..
Engravers .....	..	..	1	..	..
Umbrella Makers .....	..	..	1	..	..
Timber Yards	4	..	..	..	..
Boat Builders .....	..	1	1	..	..
Saddlers .....	..	3	3	..	..
Bakehouses .....	..	59	..	..	..
Basket Makers.....	..	..	3	..	..
Fish Curing.....	..	..	..	..	3
China Rivetting .....	..	..	1	2	..
Chocolate Making	1	..	..	..	..
Totals....	82	370	134	114	33

HOME WORK.

Occupiers of Factories and Workshops are compelled to keep lists of the names and addresses of persons employed by them, to execute work at their own homes, and to forward copies of such lists to the Local Authority in February and August of each year. Prescribed forms of lists are forwarded to the various tradespeople who employ persons, so there is no excuse for the non-delivery of the lists.

60 notices were served on occupiers of Factories and Workshops as to keeping and sending of lists.

44 lists, containing the names of 114 persons, have been received. These lists are of great assistance, as when a case of infectious disease is notified, a glance down the list will show at once whether any home work is being done at the infected house.

Each outworker's residence was visited, and in 9 cases the cleansing of the rooms used as workrooms was ordered and carried out.

BAKEHOUSES.

There are 59 Bakehouses on the Register, of which 11 are at present unoccupied; one has also been demolished during the year. None of these come under the definition of "Underground Bakehouses," as laid down by Sect. 101, of the Factory Act.

In 10 instances the periodical limewashing was found to be overdue, and on the necessary orders being served, this was remedied.

No other cause of complaint was found on the many visits of inspection which were made.

REPORTS OF H.M. INSPECTOR OF FACTORIES.

During the year 2 notices of contravention of the Act, and remediable under the Public Health Act, viz., 1 insufficient and 1 not separate w.c. accommodation for mixed sexes, were received from H.M. Inspector, and the necessary action taken to remedy it. In addition to the above, 2 notices of occupation of workshops were received from him, and same were entered in the Register.

In conclusion, Mr. Chairman and Gentlemen, again I beg to thank you for your continued valuable support in the carrying out of my duties, and for your kind consideration in all matters I have brought before you.

To the Town Clerk, the Medical Officer of Health, the Borough Engineer, the Food Inspector, Assistant Inspector, and other Officials, I also tend my thanks for their valuable co-operation.

I am,

Mr. Chairman, Ladies and Gentlemen,

Yours faithfully.

ALFRED WALLACE MERRIE,
Sanitary Inspector.